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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/556,392	04/24/2000	Yuichi Noda	P107399-00010	7343	
23353	7590 06/18/200	3			
	ISHMAN & GRAUE	EXAMINER			
	STREET N.W., SUITE	SMITH, ZANDRA V			
WASHING	TON, DC 20036		ART UNIT PAPER NUMBER		
			2877		
			DATE MAILED: 06/18/2003		

Please find below and/or attached an Office communication concerning this application or proceeding.

:		Application No.	Applicant(s)	- Ac
• '	_	09/556,392	NODA ET AL.	7 /
Off	ice Action Summary	Examiner		
	_		Art Unit	
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Period for Repl	/		most mar are correspondence ad	uress ••
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1) Respo	onsive to communication(s) file	ed on .		
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closed Disposition of C	I in accordance with the praction	ce under <i>Ex parte Quayle</i> , 1	935 C.D. 11, 453 O.G. 213.	o menta ja
4)⊠ Claim(s	s) <u>1-6</u> is/are pending in the app	plication.		
4a) Of t	he above claim(s) is/are	e withdrawn from considerat	on.	
5) Claim(s	s) is/are allowed.			
6)⊠ Claim(s	s) <u>1-4</u> is/are rejected.			
7)⊠ Claim(s	s) <u>5 and 6</u> is/are objected to.			
8) Claim(s) are subject to restricti	on and/or election requireme	ent.	
Application Pap	ers			
9)∐ The spe	cification is objected to by the	Examiner.		
10)∏ The drav	ving(s) filed on is/are: a	a)□ accepted or b)□ objected	to by the Examiner.	
Applica —	ant may not request that any object	ction to the drawing(s) be held i	n abeyance. See 37 CFR 1.85(a).	
	oosed drawing correction filed		b) disapproved by the Examine	er.
	oved, corrected drawings are requ		٦.	
	or declaration is objected to b	y the Examiner.		
	U.S.C. §§ 119 and 120			
	ledgment is made of a claim fo	or foreign priority under 35 L	.S.C. § 119(a)-(d) or (f).	
)☐ Some * c)☐ None of:			
1.⊠ C	ertified copies of the priority do	ocuments have been receive	ed.	
2. C	ertified copies of the priority do	ocuments have been receive	ed in Application No	
	opies of the certified copies of application from the Internat ttached detailed Office action	tional Bureau (PCT Rule 17.	been received in this National S 2(a)). es not received.	Stage
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Attachment(s)		priority under 00 t	5.5.5. 33 120 and/of 121.	
1) Notice of Refere 2) Notice of Drafts 3) Information Disc	ences Cited (PTO-892) person's Patent Drawing Review (PTC closure Statement(s) (PTO-1449) Pape	0-948) 5) □ No	erview Summary (PTO-413) Paper No(s tice of Informal Patent Application (PTO ner:	
5. Patent and Trademark Offic TO-326 (Rev. 04-01)	e	Office Action Summary	Part of Paper No. 8	

Application/Control Number: 09/556,392

Art Unit: 2877

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Arndt et al.* (5,949,550) in view of *Leifeld* (5,648,553).

As to **claims 1-4**, Arndt discloses a system for detecting defects in a moving web, comprising:

using an optical sensor (22) to apply light to a predetermined position of a moving route of sheet material and to pick up light reflected from the surface of the sheet material that has been shifted by a predetermined distance (col. 3, lines 57-68); and

judging a difference in reflectivity (brightness), using a computer (28) from the reflected image and foreign matter (col. 4, lines 23-29 and 54-68).

Arndt differs from the claimed invention in that details of the optical sensor are not provided. However an optical sensor including a light source and camera are well known as taught by Leifeld. Leifeld discloses an imaging apparatus for scanning a clothed roll in a fiber

Art Unit: 2877

processing machine that includes a light source and camera to illuminate the roll, the light illuminating the roll at a predetermined angle (see fig. 6, items 18-19). It would have been obvious to one having ordinary skill in the art at the time of invention to illuminate the roll at a predetermined angle to ensure that the light reflected from the surface directly enters the camera.

Allowable Subject Matter

Page 3

Claims 5-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: image processing for detecting whether or not the brightness of the reflected image becomes a predetermined value or less.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lucas (4,213,708) and Watanabe et al. (5,109,236).

Fax/Telephone Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zandra V. Smith whose telephone number is (703) 305-7776. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on (703)308-4881. The fax phone numbers for the

Application/Control Number: 09/556,392

Art Unit: 2877

organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)(30)5-0530.

Landra V. Smith Primary Examiner Art Unit 2877 Page 4

June 13, 2003